



Next Photo Please: Towards Visually Consistent Sequential Photo Browsing

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<http://www.ee.columbia.edu/dvmm>

Sequential Photo Browsing

- Lexicographic or chronological order



- Persistence of human vision
 - An afterimage is thought to persist on the retina
- Inconsistent visual experience for the photo viewers

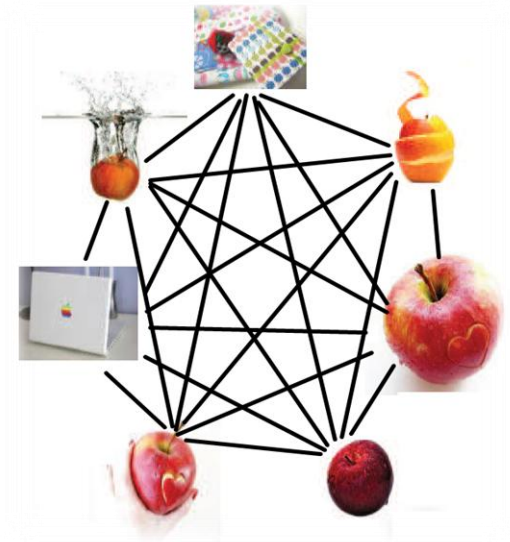
Visually Consistent Photo Browsing

- Travelling Salesman Problem
- Given a list of **cities** and their pairwise **distances**, the task is to find a shortest possible **tour** that visits each **city** exactly once.



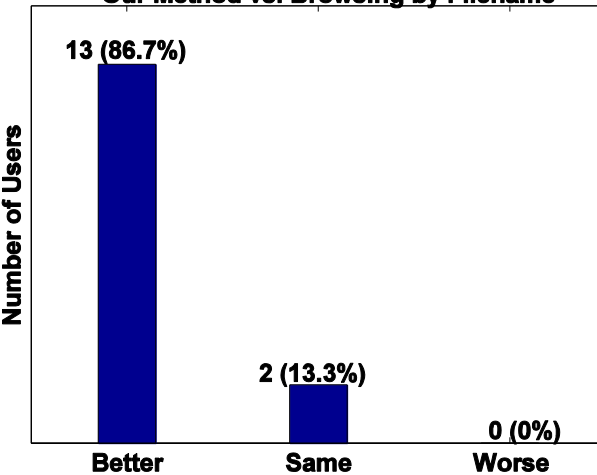
- Hamiltonian cycle
- NP-complete problem
- Dynamic programming

- Browsing sequence seeking
- Given a list of **photos** and their pairwise **dissimilarities**, the task is to find a shortest possible **browsing sequence** that visits each **photo** exactly once.

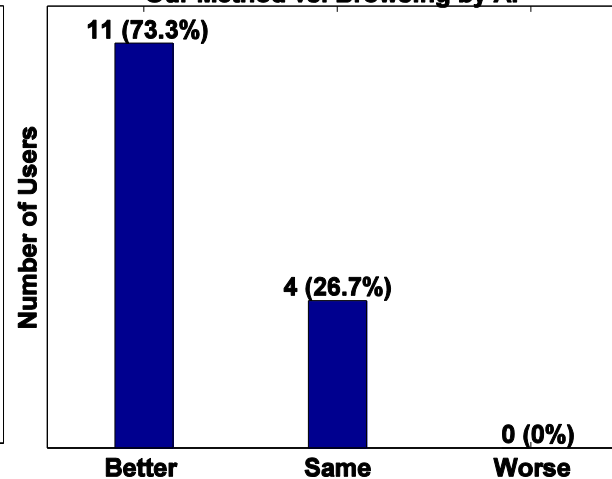


Results

Our Method vs. Browsing by Filename



Our Method vs. Browsing by AP



- 16 photo albums
- 15 users
- Compare with "Browsing by filename" & "Browsing by AP clustering"

Human Centered Photo Browsing -> Photo-to-Video Transformation

